

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**



(19)

(11) Publication number:

61233685 A

Generated Document.

PATENT ABSTRACTS OF JAPAN

(21) Application number: 60073858

(51) Intl. Cl.: C07D491/056

(22) Application date: 08.04.85

(30) Priority: (43) Date of application publication: 17.10.86 (84) Designated contracting states:	(71) Applicant: MITSUBISHI CHEM IND LTD (72) Inventor: TAKEDA YOSHIYUKI KAWASHIMA OSAMU FURUKAWA SHIRO OGINO YASUKAZU (74) Representative:
---	---

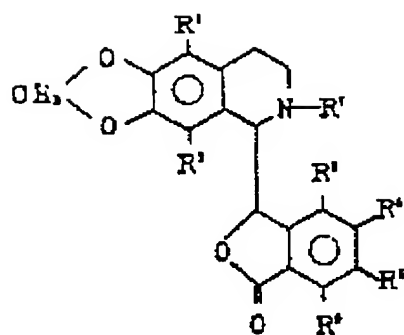
**(54) PRODUCTION OF
AMINATED PHTHALIDE-
ISOQUINOLINE**

(57) Abstract:

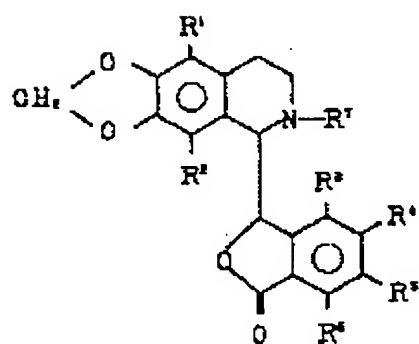
PURPOSE: To obtain the titled compound industrially advantageously, by reducing a corresponding nitro compound in a specific solvent in the presence of a catalyst of a metal of group IB or VIII by the use of a metallic boron hydride as a reducing agent.

CONSTITUTION: A compound shown by the formula I (R1 and R2 are H, or lower alkoxy; at least one of R3WR6 is nitro, and the others are H or lower alkoxy; R7 is lower alkyl) is reduced in a solvent such as an aliphatic alcohol, aliphatic ether, or dimethylformamide in the presence of a catalyst of a metal (e.g., copper) of group IB or VIII or its compound by the use of a metallic boron hydride (e.g., NaBH4) as a reducing agent, the reaction mixture is blended with a halogenated hydrocarbon solvent (e.g., dichloromethane), crystal of the reaction product is dissolved, the blend is filtered and the precipitated metallic catalyst is separated to give the aimed compound shown by the formula II.

COPYRIGHT: (C)1986,JPO&Japio



I



II